

REMARKS

This Amendment responds to the Office Action dated November 4, 2004 in which the Examiner rejected claims 1, 3-7, 12 and 14-22 under 35 U.S.C. §102(e).

Applicants respectfully request the Examiner acknowledge the priority documents filed September 17, 1999, and the Information Disclosure Statement filed December 7, 2004.

As indicated above, claim 1 has been amended to make explicit what is implicit in the claim. The amendment is unrelated to a statutory requirement for patentability.

Claim 1 claims a vehicle-mounted communication device comprising a transmitting/receiving means and a relay means. The transmitting/receiving means is provided for wireless communication of information with road-side communication means located at a road side. The vehicle-mounted communication device is not provided with encryption means for decoding encryption information. The encryption information is passed through the vehicle-mounted communication device in an undecided state. The relay means is for relaying encryption information, received from the road side by the transmitting/receiving means, to an IC card which is connected via an I/O port of the IC card to the vehicle-mounted communication device. The IC card includes a) storage means for storing user information regarding a balance of charges and b) encryption means that encrypts and outputs output information based on the user information and decodes encrypted input information regarding the user information. The relay means relays the output information encrypted by the IC card to the transmitting/receiving means. An ID of the vehicle is stored in the vehicle-mounted communication device for corresponding

the vehicle and the vehicle-mounted communication device. A certified key code is stored in the IC card for corresponding the vehicle-mounted communication device and the IC card.

Through the structure of the claimed invention having a relay means for relaying encryption information to an IC card which is connected via an I/O port of the IC card to the vehicle-mounted communication device as claimed in claim 1, the claimed invention provides a vehicle-mounted communication device with improved security. The prior art does not show, teach or suggest the invention as claimed in claim 1.

Claims 1, 3-7, 12 and 14-22 were rejected under 35 U.S.C. §102(e) as being anticipated by *Hoshino et al* (U.S. Patent No. 6,088,680).

Hoshino et al appears to disclose an automatic toll adjusting system employing a storage medium having a radio communicating function, which system enables automatic toll adjustment resulting in no ticket being issued or no stopping of a vehicle. (col. 1, lines 15-19) In FIG. 1, reference numeral 2 denotes a frequency converting apparatus, and 3 denotes a vehicle. The frequency converting apparatus 2 is mounted on the vehicle 3 travelling on a toll road. When the storage medium 1 is inserted therein, the frequency converting apparatus 2 converts information at the first predetermined frequency, supplied from the storage medium 1, into the second predetermined frequency to transmit it to the outside by radio communication. The frequency converting apparatus also converts information at the second predetermined frequency, supplied from the outside, into the first predetermined frequency to transmit it to the storage medium 1 by radio communication. At the toll adjusting gate employing a first toll payment system, information is directly

exchanged with the storage medium 1 by radio communication at the first predetermined frequency to automatically adjust a toll in the first toll payment system. At the toll adjusting gate employing the second toll payment system, the storage medium 1 is inserted in the frequency converting apparatus 2, and information is indirectly exchanged with the storage medium 1 via the frequency converting apparatus 2 by radio communication at the second predetermined frequency to automatically adjust a toll in the second toll payment system. (col. 8, lines 1-24)

Thus, *Hoshino et al* merely discloses a storage medium 1 which communicates by radio communication either directly with a first toll payment system or indirectly via a frequency converting apparatus with the second toll payment system. Nothing in *Hoshino et al* shows, teaches or suggests an IC card which is connected via a I/O port to a vehicle-mounted communication device as claimed in claim 1. Rather, *Hoshino et al* teaches away from the claimed invention since the IC card communicates via radio communication.

Since nothing in *Hoshino et al* shows, teaches or suggests connecting an I/O port of an IC card to a vehicle-mounted communication device as claimed in claim 1, applicants respectfully request the Examiner withdraws the rejection to claim 1 under 35 U.S.C. §102(e).

Claims 3-7, 12 and 14-22 depend from claim 1 and recite additional features. Applicants respectfully submit that claims 3-7, 12 and 14-22 would not have been anticipated by *Hoshino et al* within the meaning of 35 U.S.C. §102(e) at least for the reasons as set forth above. Therefore, applicants respectfully request the Examiner withdraws the rejection to claims 3-7, 12 and 14-22 under 35 U.S.C. §102(e).

The prior art of record, which is not relied upon, is acknowledged. The references taken singularly or in combination do not anticipate or make obvious the claimed invention.

Thus it now appears that the application is in condition for reconsideration and allowance. Reconsideration and allowance at an early date are respectfully requested.

If for any reason the Examiner feels that the application is not now in condition for allowance, the Examiner is respectfully requested to contact, by telephone, the applicants' undersigned attorney at the indicated telephone number to arrange for an interview to expedite the disposition of this case.

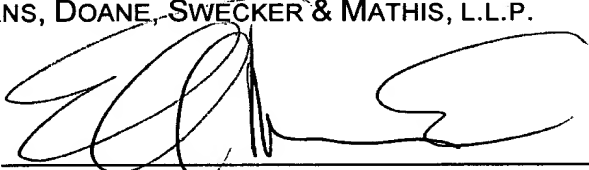
In the event that this paper is not timely filed within the currently set shortened statutory period, applicants respectfully petition for an appropriate extension of time. The fees for such extension of time may be charged to our Deposit Account No. 02-4800.

In the event that any additional fees are due with this paper, please charge our Deposit Account No. 02-4800.

Respectfully submitted,

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